

# Surge Arresters

# GDT Series

#### ROHS

#### Description

Gas-filled surge arresters are classical components for protecting the installations of the telecommunications. Surge arresters are also essential for protecting the fax machines and modems used for data transmission and increasingly equipped with sophisticated electronics. They are thus fitted at the input of the power supply system together with varistors and at the connection points to telecommunication lines. They have become equally indispensable for protecting base stations in mobile telephone systems as well as extensive cable television (CATV) networks with their repeaters and distribution systems.



These protective components are also indispensable inother sectors:

- In AC power transmission systems, they are often used with current-limiting varistors
- In consumer electronic terminals such as back-projection TV sets and computer monitors
- In air-conditioning equipment

The development of our surge arresters is based on international standards such as ITU-T, K.12, IEC 61643-311 (EN 61643-311), IEC 61643-11 (EN 61643-11), RUSPE-80/IEEE 465.1 and DIN VDE 0845, Part 2. They are also used to enable modules/equipment to meet various regulatory requirements including ITU K20/K21, IEC61000-4-5, Telcordia GR1361/GR974/1089.

S3RXXXL

Compared to surge suppression using other technologies, surge arrester possess fast response speed,low capacitance and high current handling capability.

#### Surge arrester:

- Cannot be damaged by voltage
- Eliminate hysteresis and heat dissipation typically found with clamping devices
- · Eliminate voltage overshoot caused by fast-rising transients
- Are non-degenerative
- Will not fatigue
- Have low capacitance, making them ideal for high-speed transmission equipment



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## V-I Characteristics



Typical Response Behavior





#### **GDT Series**

# **Surge Arresters** Typical Applies

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## Dimensions



Package Type	Description	Outline	Box	
Ø8×10(mm)	DIP Pack	Box	100pcs	



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#### Electrical Characteristics

Part Number	DC Spark-over Voltage (100V/S)	Tolerance of Vs	Impulse Spark-over Voltage (1kV/µS)	Alternating Discharge Current (50HZ)	Impulse Discharge Current (8/20µS)	Insulation Resitance	Capacitance	Device Marking Code
	V	%	V	Α	KA	Ω	pF	
S3R075L	75	±25	≤500 ≤400	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 75
S3R090L	90	±20	≤500 ≤400	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 90
S3R150L	150	±20	≤500 ≤450	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 150
S3R230L	230	±20	≤500 ≤450	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 230
S3R350L	350	±20	≪650 ≪500	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 350
S3R470L	470	±20	≪800 ≪650	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 470
S3R600L	600	±20	<pre>≤1100</pre> ≤950	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 600
S3R800L	800	±20	≤1300 ≤1050	2.5×2	2.5×2	≥10 <sup>9</sup>	≤2	3R 800

\* For surge ratings, see table below.

Notes: All measurements are made at an ambient temperature of 25°C. IPP applies to -40°C through +90°C temperature range.